AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1	1. (Currently amended) A method to facilitate debugging a platform-
2	independent virtual machine, comprising:
3	providing an agent on the platform-independent virtual machine, wherein
4	the agent provides a set of functions for accessing a plurality of variables in the
5	platform-independent virtual machine and wherein the agent is limited to
6	gathering a current state of variables within the platform-independent virtual
7	machine, whereby limiting the agent to gathering the current state of variables
8	within the platform-independent virtual machine allows the method to operate on
9	a system with limited memory;
10	adapting the platform-independent virtual machine to call the set of
11	functions within the agent;
12	examining a current state of the plurality of variables in the platform-
13	independent virtual machine using the agent; and
14	communicating the current state of the plurality of variables to a host
15	machine, wherein an operator of the host machine can analyze the current state of
16	the plurality of variables to determine if the platform-independent virtual machine
17	is operating correctly and, if not, to determine a possible cause of incorrect
18	operation.

- 2. (Original) The method of claim 1, wherein the agent includes a core portion that is common across multiple platforms and a platform-specific portion for each platform.
- 3. (Original) The method of claim 2, wherein the platform-specific portion includes features and structures related to a specific platform-independent virtual machine.
- 4. (Original) The method of claim 1, wherein adapting the platformindependent virtual machine to call the set of functions within the agent involves
 inserting checkpoints within executable code for the platform-independent virtual
 machine.
- 5. (Original) The method of claim 4, wherein a checkpoint uses the set of functions to examine the current state of the plurality of variables and communicate the current state of the plurality of variables to the host machine.
- 6. (Original) The method of claim 1, wherein communicating the current state of the plurality of variables to the host machine involves using one of a direct coupling and a network coupling.
- 7. (Original) The method of claim 1, wherein the agent only includes resources for collecting data, thereby limiting memory usage of the agent.
- 8. (Currently amended) A computer-readable storage medium storing instructions that when executed by a computer cause the computer to perform a method to facilitate debugging of a platform-independent virtual machine, the method comprising:

5	providing an agent on the platform-independent virtual machine, wherein
6	the agent provides a set of functions for accessing a plurality of variables in the
7	platform-independent virtual machine and wherein the agent is limited to
8	gathering a current state of variables within the platform-independent virtual
9	machine, whereby limiting the agent to gathering the current state of variables
10	within the platform-independent virtual machine allows the method to operate on
11	a system with limited memory;
12	adapting the platform-independent virtual machine to call the set of
13	functions within the agent;
14	examining a current state of the plurality of variables in the platform-
15	independent virtual machine using the agent; and
16	communicating the current state of the plurality of variables to a host
17	machine, wherein an operator of the host machine can analyze the current state of
18	the plurality of variables to determine if the platform-independent virtual machine
19	is operating correctly and, if not, to determine a possible cause of incorrect
20	operation.
1	9. (Original) The computer-readable storage medium of claim 8, wherein
2	the agent includes a core portion that is common across multiple platforms and a
3	platform-specific portion for each platform.
1	10 (Original) The computer-readable storage medium of claim 9, wherein

the platform-specific portion includes features and structures related to a specific

platform-independent virtual machine.

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- within the agent involves inserting checkpoints within executable code for the
 platform-independent virtual machine.
- 1 12. (Original) The computer-readable storage medium of claim 11,
 2 wherein a checkpoint uses the set of functions to examine the current state of the
 3 plurality of variables and communicate the current state of the plurality of
 4 variables to the host machine.
- 1 13. (Original) The computer-readable storage medium of claim 8, wherein 2 communicating the current state of the plurality of variables to the host machine 3 involves using one of a direct coupling and a network coupling.
 - 14. (Original) The computer-readable storage medium of claim 8, wherein the agent only includes resources for collecting data, thereby limiting memory usage of the agent.

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15. (Currently amended) An apparatus that facilitates debugging of a platform-independent virtual machine, comprising:

a providing mechanism that is configured to provide an agent on the platform-independent virtual machine, wherein the agent provides a set of functions for accessing a plurality of variables in the platform-independent virtual machine and wherein the agent is limited to gathering a current state of variables within the platform-independent virtual machine, whereby limiting the agent to gathering the current state of variables within the platform-independent virtual machine allows the mechanism to operate on a system with limited memory;

an adapting mechanism that is configured to adapt the platformindependent virtual machine to call the set of functions within the agent;

12	an examining mechanism that is configured to examine a current state of
13	the plurality of variables in the platform-independent virtual machine using the
14	agent; and
15	a communicating mechanism that is configured to communicate the
16	current state of the plurality of variables to a host machine, wherein an operator of

the host machine can analyze the current state of the plurality of variables to
 determine if the platform-independent virtual machine is operating correctly and,

19 if not, to determine a possible cause of incorrect operation.

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- 16. (Original) The apparatus of claim 15, wherein the agent includes a core portion that is common across multiple platforms and a platform-specific portion for each platform.
- 1 17. (Original) The apparatus of claim 16, wherein the platform-specific 2 portion includes features and structures related to a specific platform-independent 3 virtual machine.
 - 18. (Original) The apparatus of claim 15, further comprising an inserting mechanism that is configured to insert checkpoints within executable code for the platform-independent virtual machine.
 - 19. (Original) The apparatus of claim 18, wherein a checkpoint uses the set of functions to examine the current state of the plurality of variables and communicate the current state of the plurality of variables to the host machine.
 - 20. (Original) The apparatus of claim 15, wherein communicating the current state of the plurality of variables to the host machine involves using one of a direct coupling and a network coupling.

- 1 21. (Original) The apparatus of claim 15, wherein the agent only includes
- 2 resources for collecting data, thereby limiting memory usage of the agent.